

Higher Information Systems

2008 14 Relational Databases Data Retrieval

Inverdon Insurance has several branches throughout the country, each with several salespersons. A sales recording system has been set up using a relational database. The data is held in the following tables.

Draw an *entity relationship diagram* to represent this data model. **(6)**

b. Each month a report is produced to show the sales for each salesperson. The report for salesperson D Wilson for May is shown below.

(i). Name the tables and fields which would be used to produce this report. **(5)**

(ii). State **two** features of the RDBMS which would be used to calculate and display the total for this salesperson. **(2)**

Branch	Customer	Sale	Salesperson
<u>Branch number</u>	<u>Customer number</u>	<u>Customer number*</u>	<u>Sales ID</u>
Address	Customer name	<u>Sales ID*</u>	Sales name
Telephone number	Customer address	<u>Date</u>	Branch number*
	Customer telephone	Amount	

Date	Customer	Amount
07/05/07	AcmeArtefacts	£450.00
08/05/07	Deco Designs	£250.00
15/05/07	Allied National	£1258.75
...
...
31/05/07	Logotek	£216.34
	Total	£5237.11

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2009 04 Relational Databases Data Retrieval

A database stores details of rings available for purchase in a jewellery shop.

A customer query produces the following answer table.

Describe how this data has been sorted. **(3)**

Product No	Description	Size	Cost (£)
1066	Sapphire solitaire 9ct gold	P	229.99
1882	Diamond cluster 9ct gold	O	229.99
1756	Ruby and diamond band	M	195.00
1883	Emerald eternity 18ct gold	P	195.00
1981	Tanzanite cluster 18ct gold	M	195.00
1611	Diamond solitaire 9ct gold	L	150.99

2009P q.16c Relational Databases Data Retrieval

Steenhive High School Library uses a relational database. The data is held in the following tables.

Every week the librarian produces a sorted report to show the names of pupils who have books overdue, the titles and authors of those books, the amount of fines and the total amount of overdue fines. A typical weekly report is shown below.

(i). Name the tables and fields which would be required to produce this report. **(5)**

(ii). How have the fields been sorted to produce the above report? **(3)**

(iii). State **two** features of the RDBMS which would be used to calculate the weekly total of arrears. **(2)**

Book

ISBN

Title

Author name *

Category

Publisher

Cost of book

Number of copies

Loan

Loan ID

ISBN *

Pupil ID *

Date of loan

Number of days

Overdue (y/n)

Author

Author name

Nationality

Pupil

Pupil ID

Pupil name

Class

Times overdue

Amount of fines overdue